



Building Our Refuge 2009



Detroit River International Wildlife Refuge
2009 Annual Report

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Dear Friends,

Growing up, my father would frequently remind me that, "we borrow this Earth from those who come after us." This truth serves as the bedrock from which I have fought for environmental conservation my entire career and it guides my passion of growing our Detroit River International Wildlife Refuge and making it ever more accessible to the public. The Refuge is a remarkable resource to the region; it is built around the understanding that our region's ecosystems, wildlife, economy, and diversity of cultures are inextricably linked. I am proud of the work that the Refuge is doing to ensure that our precious natural wetlands, lakes, and wildlife are both preserved and protected for all future generations.

In 2009, the Refuge made great strides toward fulfilling our conservation vision for the fragile ecosystems that exist along the Detroit River and western Lake Erie, and toward our regional vision to be an international leader in sustainability. In 2009, nearly 40% of the remediation of the Refuge Gateway site – a former Chrysler paint plant – was completed in an effort to improve the quality of urban stormwater entering the Detroit River and to restore wildlife habitat. In doing so, the Refuge created 10 jobs for individuals who were previously out of work; this demonstrates that conservation is not only good for the environment, but for Michigan's economy as well. Sixty-five acres of coastal wetlands were restored at the Brancheau Unit, re-creating imperiled habitat that will sustain many species of wetland dependent wildlife. Waste Management also donated 358 acres of unique wetland and upland habitats to the Refuge to ensure long-term protection of wildlife and to offer exceptional environmental education to the future conservationists and sustainability entrepreneurs at adjacent Gibraltar schools. Finally, lake sturgeon spawning was documented on the Fighting Island sturgeon reef, marking the first time in thirty years that spawning was confirmed in the Canadian waters of the Detroit River.

Since its establishment in 2001, the Detroit River International Wildlife Refuge has leveraged \$27 million for growth and development, representing a substantial contribution to our regional economy. It has grown from 300 acres in 2001, to nearly 5,700 in 2009; a pace of nearly 500 acres per year. In doing so, the Refuge has developed an international reputation for public-private partnerships for sustainability, helped diversify southeast Michigan's economy through enhancement of ecotourism, and is passing on a natural resource legacy to future generations.

I encourage you to review the accomplishments presented in this annual report and to get involved in one of the many ongoing projects to expand and improve our Refuge. I look forward to working alongside you to reach our goals of furthering conservation, environmental education, and sustainability through the prism of these invaluable lands. By reaching out to youth, conservationists, and green entrepreneurs, we can ensure that future generations will know the remarkable opportunities that our Refuge affords us everyday, right here in southeast Michigan.

With every good wish,

John D. Dingell
Member of Congress



SUSTAINABILITY {our answer to the call}

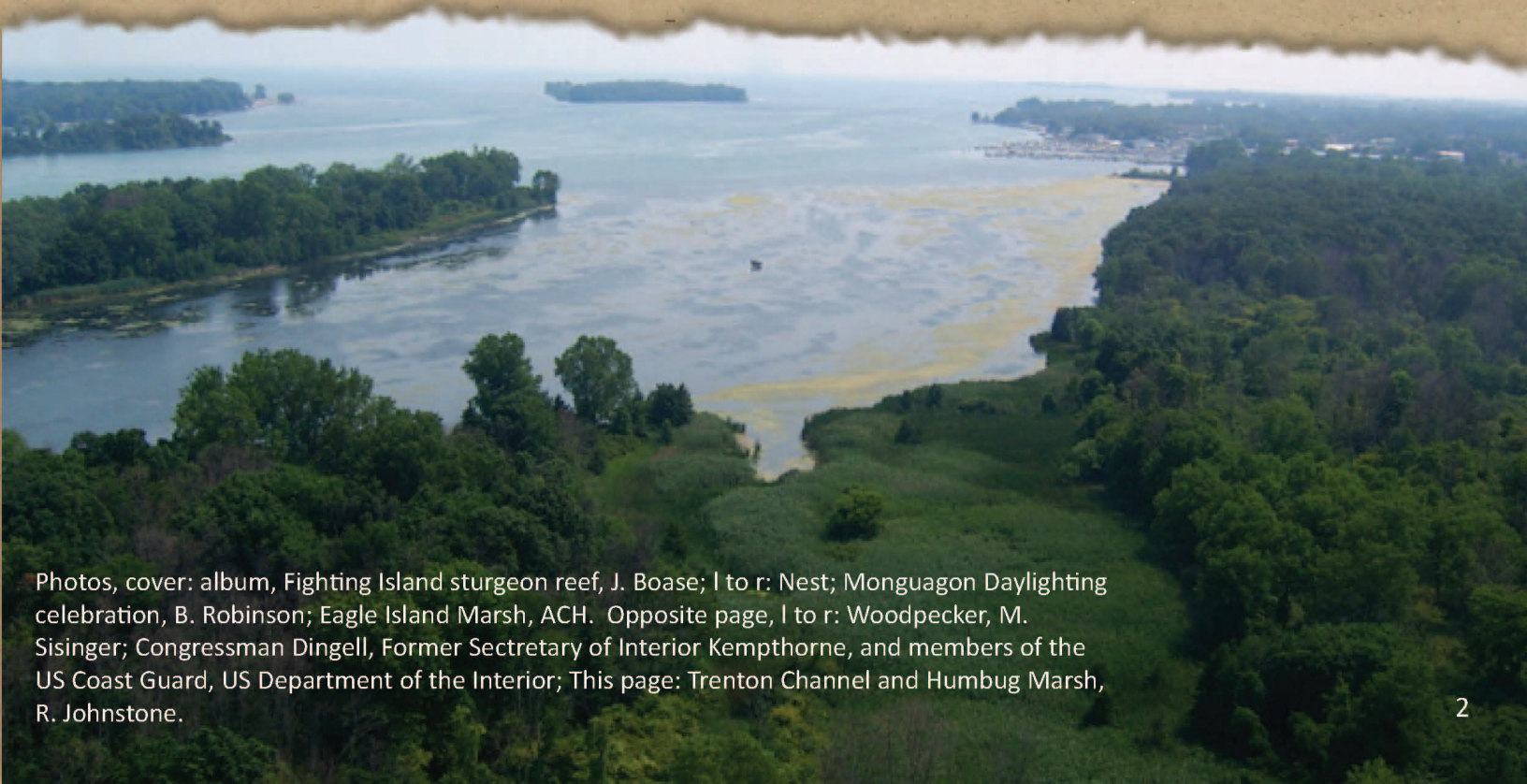
The U.S. Fish and Wildlife Service has called on Refuges to be leaders of sustainability:

to demonstrate an awareness and understanding of the interdependency of the ecosystems, resources, biodiversity, and human culture entrusted to our stewardship in order to better preserve, conserve, and protect them for future generations.

Further, the Refuge's Comprehensive Conservation Plan states that one of the primary management goals of the Refuge is to provide an institutional framework to develop effective private or public partnerships for the purpose of sustainability.

The Detroit River International Wildlife Refuge and the International Wildlife Refuge Alliance are answering this call, from restoring and sustaining wildlife habitat and cleaning urban runoff to educating the public and cultivating a stewardship ethic for our land. This 2009 Annual Report highlights the Refuge's efforts to sustain wildlife *and* people along the lower Detroit River and western Lake Erie for a more promising tomorrow.

It is intended to celebrate refuge progress and to inspire more citizens, businesses, and communities to participate in and support this work. It represents a collaborative effort between the U.S. Fish and Wildlife Service (USFWS) and the International Wildlife Refuge Alliance (IWRA), a nonprofit alliance of organizations that enhances the capacity of the USFWS to deliver its mission for the Detroit River International Wildlife Refuge (IWR).



Photos, cover: album, Fighting Island sturgeon reef, J. Boase; l to r: Nest; Monguagon Daylighting celebration, B. Robinson; Eagle Island Marsh, ACH. Opposite page, l to r: Woodpecker, M. Sisinger; Congressman Dingell, Former Secretary of Interior Kempthorne, and members of the US Coast Guard, US Department of the Interior; This page: Trenton Channel and Humbug Marsh, R. Johnstone.

HABITAT CONSERVATION

sustaining our wildlife

GIBRALTAR WETLANDS UNIT

In 2009, Waste Management donated 358 acres of unique wetland and upland habitats to the Refuge to ensure long-term protection of wildlife and to offer exceptional environmental education and interpretation to adjacent Gibraltar schools.

BURKE UNIT

In 2009, the Burke Unit was acquired with North American Wetlands Conservation Act funding and assistance from Ducks Unlimited and The Trust for Public Land. The donation of Plum Creek Bay Unit by Monroe County served as the match on this grant.

BRANCHEAU WETLAND RESTORATION

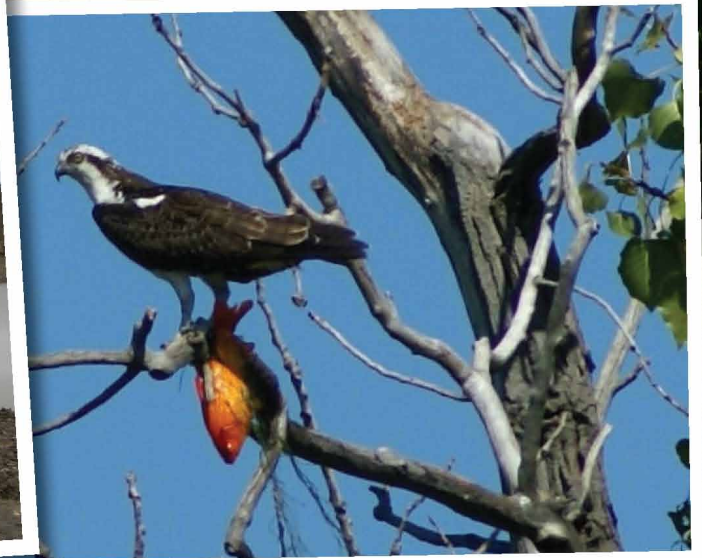
The USFWS, in partnership with Ducks Unlimited, DTE Energy, Waterfowl USA, Southwestern Lake Erie Chapter, IWRA, and The Metropolitan Affairs Coalition, completed the restoration of approximately 65 acres of coastal wetland habitat in the Brancheau Unit near the mouth of Swan Creek as it enters western Lake Erie.

BASF COMPLETES FISH HABITAT RESTORATION IN THE TRENTON CHANNEL

In 2009, BASF Corporation announced the completion of construction of nearly one acre of walleye, largemouth and smallmouth bass, and lake sturgeon habitat in the Trenton Channel near the company's Riverview property. In spring, USFWS and U.S. Geological Survey fishery biologists collected walleye and lake sturgeon in spawning-ready condition at this new habitat site.

MONGUAGON CREEK DAYLIGHTING AND WETLAND RESTORATION ON REFUGE GATEWAY

Six acres of wetlands were recreated on the Refuge Gateway in an effort to improve the quality of urban stormwater entering the Detroit River and to restore habitat and natural hydrology of the site. Funding for this project was provided by Wayne County, Clean Michigan Initiative of Michigan Department of Environmental Quality, a U.S. Environmental



Protection Agency Brownfield Cleanup grant awarded to Downriver Community Conference, Metropolitan Affairs Coalition, and the USFWS.

RETURN OF OSPREY TO WAYNE COUNTY

A pair of osprey built a nest in a cell phone tower adjacent to the Gibraltar Wetlands Unit, representing the first time that osprey have successfully nested in Wayne County since the 1890s.

INVASIVE SPECIES MANAGEMENT IN HUMBUG MARSH

Refuge staff identified ecological benchmarks for restoration of upland areas. They continued to work collaboratively with IVM Partners, ITC, and volunteers in removal and control of invasive species, especially in forest gaps where tree regeneration has simplified the understory. High water levels contributed to germination of a diverse native assemblage of emergent marsh species amidst *Phragmites* that was sprayed and killed in 2008.

COMMON TERN HABITAT

USFWS staff and partners continued to assess the effectiveness of common tern habitat restoration efforts undertaken at Grosse Ile Free Bridge, DTE Energy's Rouge River Power Plant, and Belle Isle.



Photos, opposite page, l to r: Refuge Gateway construction, B. Robinson; Osprey, K. Scrocki; Humbug Marsh, J. Urbanski. This page: top to bottom: Wayne County Executive Robert Ficano at Refuge Gateway celebration, E. Conley; Common tern, S. Seely.

RESEARCH & MONITORING

*improving knowledge
and measuring results*

LAKE STURGEON SPAWNING IN DETROIT RIVER

Lake sturgeon spawning was documented on the Fighting Island sturgeon reef in 2009 by USFWS and U.S. Geological Survey scientists, marking the first time in thirty years that spawning was confirmed in the Canadian waters of the Detroit River. Northern madtom (an endangered species), lake whitefish, and walleye also spawned on the reef.

COMMON TERNS

Breeding pair surveys were conducted throughout the Detroit River in 2009 and a productivity assessment was coupled with management efforts at the Grosse Ile Free Bridge colony. USFWS partners included

Detroit Zoological Society and Michigan Department of Natural Resources and Environment. An experimental study of nest-site selection and nocturnal incubation behavior was also conducted with Eastern Michigan University, helping guide habitat management and restoration efforts.

DETROIT RIVER HAWK WATCH

Refuge staff, in cooperation with IWRA, created a Detroit River Hawk Watch Advisory Committee consisting of ecologists, migration experts, and scientists to help guide the research and monitoring program, and to develop new outreach components of the Detroit River Hawk Watch. In addition, the Refuge, in partnership with IWRA, logged



542 hours of migration coverage at the mouth of the Detroit River during fall 2009 and completed a report on the results, contributing to 27 years of continuous monitoring of migration through the corridor.

INVASIVE SPECIES CONTROL AND RESEARCH AT HUMBUG MARSH UNIT

Refuge staff facilitated botanical studies with IVM Partners to assess the vegetative response to *Phragmites* control in coastal wetland areas and investigated the effect of deer browse in shaping the plant communities in recently disturbed upland areas.

GRASSY ISLAND

In 2009, the USFWS reached agreement with agency partners on a work plan for completing the investigative phase of Grassy Island and submitted a proposal to the Great Lakes Restoration Initiative for full funding to complete all necessary investigations.

EASTERN MICHIGAN UNIVERSITY RESEARCH

Through the use of GIS and remote sensing technology, Eastern Michigan University researchers are determining the extent of *Phragmites* invasion in Refuge units and tracking its expansion. Field experiments investigated effects of *Phragmites* on wetland ecosystems and monitored changes following *Phragmites* control.



Photos, opposite page: Gibraltar Wetlands Unit, D. O'Brien. This page, top to bottom: Common tern, S. Seely; Sharp-shinned hawk, J. Schultz; Fighting Island sturgeon reef, B. Manny; and Eastern Michigan University researchers, EMU.

COMMUNITY ENGAGEMENT

leading by example

OPEN HOUSES & INTERPRETIVE PROGRAMS

Over 4,000 people participated in open houses, wildlife observation, interpretative talks and family programs at the Refuge. Programming included an owl prowl, bird walks, and a summer series called "Great Conservationists."

VOLUNTEER WORKDAYS & ENVIRONMENTAL EDUCATION

Over 3,000 volunteer hours were logged working on trail maintenance, invasive species removal, trash collection, and construction projects within the Refuge. Over 250 students participated in on-site environmental education on the Refuge, while almost 900 students participated in Refuge-focused environmental education activities held in area schools.

of Windsor. The conference theme was "Ecological Benefits of Habitat Modification." The conference report is available online at: www.stateofthestrat.org

YOUTH CONSERVATION CORPS (YCC)

A YCC crew was stationed at the Refuge from June-August. Five high school students participated in this work/earn/learn program, that is set up to undertake conservation work on public lands, provide meaningful employment, and give youth an understanding and appreciation of the natural environment. YCC work included cutting $\frac{3}{4}$ mile of trail, constructing foot bridges, and removing invasive species.

POINTE MOUILLEE WATERFOWL FESTIVAL

In September, over 8,000 people attended the 61st annual Pointe Mouillee Waterfowl Festival at the Pointe Mouillee State Game Area. The Detroit River IWR once again provided staff and assistance to help make the festival a success.

HAWKFEST

In September, over 6,000 people attended the annual Hawkfest at Lake Erie Metropark. IWRA once again provided funding for a bird program and staff at the event.

COMCAST CARES DAY

On April 22, Earth Day, over seventy employees of Comcast joined IWRA and Refuge staff to remove debris from the Humbug Marsh Unit. The group was able to remove garbage from several acres of land.



YCC summer work crew; R. Toles.

4TH BIENNIAL STATE OF THE STRAIT CONFERENCE

More than 200 scientists, government managers, students, and concerned citizens attended the 2009 conference at the University

EDUCATIONAL FEATURES ADDED TO HUMBUG MARSH

A wildlife observation platform and three interpretive learning stations were constructed in the Humbug Marsh Unit in 2009. Funding for these projects was provided by DTE Energy Foundation and Praxair.

FISHING TOURNAMENTS

FLW Outdoors hosted an American Fishing League Tournament and a National Guard college fishing tournament in July, and Bass Fishing League Tournaments in August and September.

NATIONAL WILDLIFE REFUGE WEEK

To celebrate National Wildlife Refuge Week, the third annual “Big Sit” was held at Humbug Marsh Unit. Over 50 visitors participated in the count.

INTERNATIONAL MIGRATORY BIRD DAY

The Refuge and Lake Erie Metropark joined together to host a “Welcome Home Migratory Bird Bash” on May 8-9. Bird walks, interpretive talks and children’s activities were offered throughout the weekend. In addition, the Refuge’s first Migratory Bird Patch Contest winner was announced.

ANNUAL BENEFIT DINNER

The fourth annual Benefit Dinner, *Summer BBQ in the Refuge*, took place on June 27 at Lake Erie Metropark and was attended by over 250 people. Major sponsors of the event included BASF Corporation, DTE Energy, ITC Holdings, Consumers Energy Foundation, and CN Railroad. Congressman John Dingell, DTE Energy, and Mike Morrin received the first annual “John Dingell Friends of the Refuge” awards.

BOAT DOCK & FISHING PIER AT REFUGE GATEWAY

In 2009, Metropolitan Affairs Coalition received partial funding from the Great Lakes Fishery Trust for construction of a fishing access facility for shore-based, public fishing opportunities and for use by Michigan Sea Grant’s Great Lakes schoolship. Fundraising for construction will continue in 2010.

PLANTING WORKSHOPS AT REFUGE GATEWAY

Over ninety volunteers gathered for three planting workshops to plant over 230 native trees and shrubs at the Refuge Gateway. Students from Madonna University, Eastern Michigan University, University of Michigan, and Wayne State University participated in the workshops, which extended stewardship opportunities and began efforts to restore wildlife habitat on this parcel.

VISITORS SERVICE PLAN

In 2009, USFWS staff began writing the Refuge’s Visitor Service Plan and held public meetings on Humbug Marsh Unit, environmental education, and a hunt plan. The plan is projected to be completed in 2010.



Planting workshop at Refuge Gateway; D. Martin.

CAPACITY BUILDING *{cultivating stewardship for the future}*

To help achieve Refuge goal's of fostering partnerships, deliver its mission, and build capacity, the Refuge has a Friends Group -- IWRA. IWRA's sole mission is "to support the first International Wildlife Refuge in North America by working through partnerships to protect, conserve, and manage the refuge's wildlife and habitats, and to create exceptional conservation, recreational and educational experiences to develop the next generation of conservation stewards."

The IWRA board members include: Mr. Dick Micka (chairperson), Ms. Anita Twardesky (Vice Chairperson, Riverside Kayak Connection), Ms. Andrea Kline (Secretary, Environmental Consulting and Technology, Inc), Mr. Tim Bowman (Treasurer, Monroe Bank & Trust), Dr. Bruce Jones (Grosse Ile Nature and Land Conservancy), Mr. Dick Whitwam (Pte. Mouilee Waterfowl Festival), Ms. Molly Luempert-Coy (DTE Energy), Mr. Randy Hicks (BASF Corporation), Ms. Mary Bohling (Michigan Sea Grant), Mr. Steven Beachum (Consumers Energy), Ms. Yvette Pugh (AT&T), Mr. Richard Tuzinsky (The Nature Conservancy), Mr. Tom O'Hara (Monroe Bank & Trust), Mr. Jack Liang (Huron-Clinton Metropolitan Authority), Mr. Jamie Kryscynski (ITC), and Mr. David Shefferly (Ducks Unlimited).

During 2009, Beth Olson served as interim Executive Director of IWRA and Suzanne Petre and Karen Skrocki served as outreach coordinators. Joann VanAken was hired as office manager in December. In May, Anna Cook joined the Refuge staff as a biological technician to coordinate the State of the Strait conference and a publication on soft shoreline engineering projects. Matthew Byrom served as an intern from Wayne

Metropolitan Community Action Agency. Many other volunteers provided assistance in the Annual Benefit Dinner, habitat restoration, invasive species removal, and outreach activities. Metropolitan Affairs Coalition continued to provide support for proposed projects common to the Greater Detroit American Heritage River Initiative and the Detroit River IWR. Finally, U.S. Environmental Protection Agency's Large Lakes Research Station continued to provide office space and support for refuge staff.

Throughout 2009, numerous Refuge presentations were made to raise awareness and build support, including to the Great Lakes Habitat Conference in Chicago, Downriver Walleye Federation, the U.S. Army Corps of Engineers-Detroit District, The Erb Foundation, Engineering Society of Detroit, University of Michigan, Trenton

City Council, Trenton Parks and Recreation, Detroit Riverfront Conservancy, Michigan Natural Resources Commission, University of Windsor, International Joint Commission's Boundary Waters Treaty Celebration, Eastern Michigan University, Wayne State University, Downriver Community Conference's Brownfield Consortium, Erie Shores Birding Association, Essex Region Conservation Authority, Trenton Garden Club, and Grosse Ile Nature and Land Conservancy.



Owl Program at Humbug; K. Skrocki.



WHAT'S NEXT



The Detroit River IWR will continue to place a high priority on growing the refuge, through public-private partnerships, while opportunities still exist. A list of refuge priorities for 2010 is presented below:

- Acquiring at least two new refuge tracts with \$1.8 million of funding from U.S. Department of Transportation
- Working with Canadian partners to add high quality habitat lands to the Canadian portion of the Detroit River IWR
- Completing a Refuge Visitor Services Plan and a Hunt Plan
- Supporting the Capital Campaign Committee in their efforts to secure funding for the Refuge Gateway
- Constructing the perimeter greenway trail on the outside of the fence at Humbug Marsh Unit with funding from U.S. Department of Transportation
- Completing the shoreline restoration and native planting project at the Refuge Gateway with a National Coastal Wetlands Conservation Program grant and, by combining it with another \$200,000 subgrant from the Downriver Community Conference, completing earthwork for another 6 acres of the site
- Completing the fundraising for construction of the boat dock/fishing pier at the Refuge Gateway
- Continuing invasive species management at refuge management units, including undertaking prescribed burns at Humbug Marsh Unit and Strong Unit
- Continuing to work with partners to document the effectiveness of the sturgeon spawning reef constructed off Fighting Island and the spawning reef off BASF Riverview
- Securing necessary funding from Great Lakes Restoration Initiative to complete the investigative phase of Grassy Island
- Sustaining Detroit River Hawk Watch and performing common tern research
- Working in partnership with Eastern Michigan University to obtain GIS base maps of each refuge unit and adding all available data layers
- Supporting the 2010 IWRA fundraiser on June 5 in Pointe Mouillee State Game Area
- Continuing to support established events such as International Migratory Bird Day, the Big Sit, National Public Lands Day, FLW Outdoors Fishing Tournaments, the annual HawkFest, Pointe Mouille Waterfowl Festival, World Wetlands Day, and a Lotus Tour with the Monroe Garden Club
- Expanding refuge educational/outreach activities, such as guided tours of Humbug Marsh and interpretive programs; and
- Updating and improving the refuge website and supporting IWRA's website

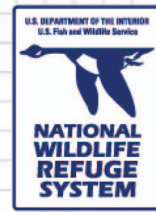
Photos, this page: M. Sisinger; Opposite, l to r: DTE Energy Wildlife Observation Deck overlooking Monguagon Delta in Humbug Marsh, D. Mitchell; Refuge staff, IWRA members and community members at dedication of deck, D. Mitchell.



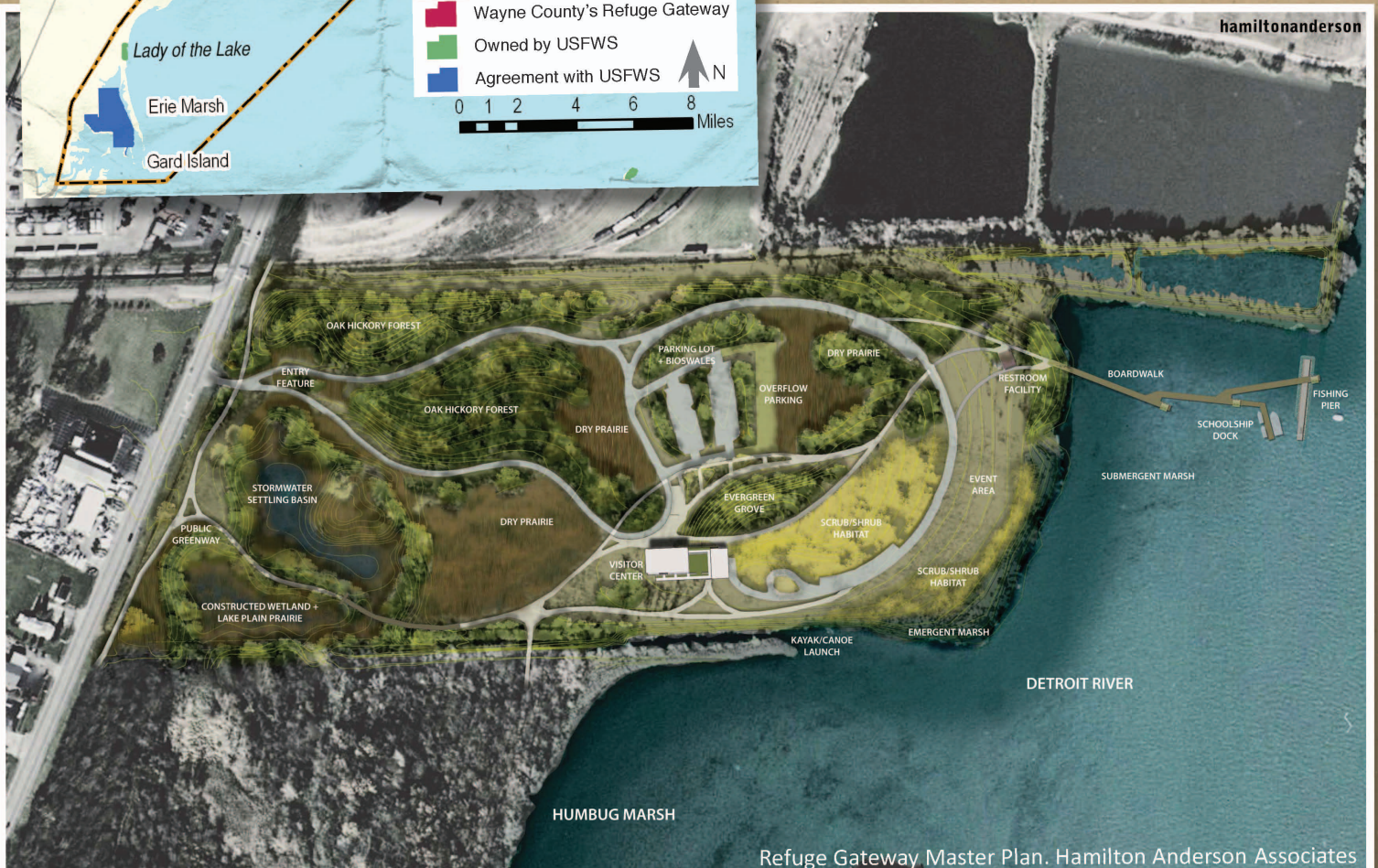


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For more information:
www.fws.gov/midwest/detroitriver/index.html
www.iwralliance.org



Refuge Gateway Master Plan. Hamilton Anderson Associates